



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,217	02/25/2004	Edmund Arthur Flexman	CL1375USCNT	3035

23906 7590 04/25/2007  
E I DU PONT DE NEMOURS AND COMPANY  
LEGAL PATENT RECORDS CENTER  
BARLEY MILL PLAZA 25/1128  
4417 LANCASTER PIKE  
WILMINGTON, DE 19805

EXAMINER
----------

RONESI, VICKEY M

ART UNIT	PAPER NUMBER
----------	--------------

1714

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/25/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/786,217

Applicant(s)

FLEXMAN ET AL.

Examiner

Vickey Ronesi

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f):
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. All outstanding claims objections and 35 USC 112, 2<sup>nd</sup> paragraph rejections are withdrawn in light of applicant's amendment filed on 2/7/2007.
2. It is noted that all filed papers in this application should have the correct U.S. patent serial number. While the first page of the correspondence recited 10/786217, the accompanying papers--including amendments to claims and specification as well as applicant's remarks--all recited the parent serial number 09/889875.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.
4. No new grounds of rejection are set forth below. Thus, the following action is properly made final.

### ***Priority***

5. If applicant desires to claim the benefit of a prior-filed application under 35 U.S.C. 120, a specific reference to the prior-filed application in compliance with 37 CFR 1.78(a) must be included in the first sentence(s) of the specification following the title or in an application data sheet. For benefit claims under 35 U.S.C. 120, 121 or 365(c), the reference must include the relationship (i.e., continuation, divisional, or continuation-in-part) of the applications.

### ***Claim Rejections - 35 USC § 103***

6. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Metzenmacher et al in view of Williams (GB 2 301 105) and Hyde (US 4,399,246).

The rejection is adequately set forth in paragraph 6 of Office action mailed on 8/8/2006 and is incorporated here by reference.

***Response to Arguments***

7. Applicant's arguments filed 2/7/2007 have been fully considered but they are not persuasive. Specifically, applicant argues (A) that the compositions of the present invention unexpectedly exhibit an increase in physical properties; (B) that Williams does not teach improved physical properties by using nylon and magnesium hydroxide; (C) that the mean average particle size taught by Hyde is only for fillers having an aspect ratio greater than 5; and (D) that Hyde teaches aminofunctional silane-treated fillers which are deficient when compared to the presently claimed fatty acid-treatment as shown in the inventive and comparative data of the specification as originally filed.

With respect to argument (A), applicant fails to establish unexpected results for several reasons. First, the data is not commensurate in scope with the scope of the claims. In particular, only three mineral fillers are exemplified (i.e.,  $\text{TiO}_2$ ,  $\text{CaCO}_3$ , and  $\text{MgOH}$ ) and only two saturated organic acids are exemplified (i.e., stearic acid and decanoic acid). Case law holds that evidence of superior properties in one species insufficient to establish the nonobviousness of a subgenus containing hundreds of compounds). *In re Greenfield*, 571 F.2d 1185, 1189, 197 USPQ 227, 230 (CCPA 1978). Furthermore, the criticality for upper limit of the range of spherical diameter of about 0.1 to less than 3.5 microns cannot be established with the data because only criticality is shown for particle sizes of 0.22 (for  $\text{TiO}_2$ ) and 0.7 microns (for  $\text{CaCO}_3$ ) when compared to a filler with a particle size of 3.5 microns. Case law holds that evidence is insufficient to rebut a

Art Unit: 1714

*prima facie* case if not commensurate in scope with the claimed invention. *In re Grasselli*, 713 F.2d 731, 741, 218 USPQ 769, 777 (Fed. Cir. 1983). Second, the data is not a closest comparison to the closest prior art of Metzenmacher et al which teaches a surface treatment of an unsaturated fatty acid compound and siloxane derivative. Applicant's comparisons to surface treatments with octa-triethoxy silane and 3-aminopropyl triethoxy silane are not proper comparison to the closest prior art. A proper comparison would be to a surface treatment with unsaturated fatty acid compound and siloxane derivative. Case law holds that comparative showings must compare the claimed subject matter with the closest prior art to be effective. See *In re Burckel*, 592 F.2d 1175, 1179, 201 USPQ 67, 71 (CCPA 1979). Third, applicant's data does not provide criticality for the claimed invention given that some of the embodiments of the claimed invention do not provide for improved Izod impact properties. In particular, Tables 5, 7, 9, 10, and 11 show comparative data having better Izod impact properties.

With respect to argument (B), Williams is relied upon to teach the use of nylon 6 and nylon 66 in compositions having a flame retardant filler. While Williams does not disclose compositions with improved physical properties, this does not discourage one of ordinary skill in the art to utilize a nylons as the polyamide in the flame-retardant filler-containing composition of Metzenmacher. Although Metzenmacher and Williams do not disclose improved impact resistance, case law holds that it "does not alter the conclusion that its use in a prior art composition would have been *prima facie* obvious from the purpose disclosed in the reference." *In re Linter*, 458 F.2d 1013, 173 USPQ 560 (CCPA 1972).

With respect to argument (C), Hyde was relied upon for its teachings regarding particles size for reinforcing fillers in polyamides. While the explicitly specified fillers of Hyde are platy

Art Unit: 1714

or needle-like, this does not render the teachings by Hyde irrelevant. In particular, Metzenmacher teaches the use of various fillers to impart hardness and reinforcement, which include metal oxides such as titanium oxide (col. 3, lines 41-44), which are fillers also used as the flame-inhibiting fillers and which are spherical in shape. Furthermore, Metzenmacher teaches that improved physical properties such as tensile strength, elongation at break, and modulus are had by using the flame-inhibiting fillers (see Table bridging cols. 7 and 8). In addition, the examiner notes that Metzemacher exemplified Magnifin H% magnesium hydroxide which inherently has the presently claimed particle size. Evidence to support the examiner's position is found in Velasco et al (*Polymer*, 43 (2002) 2805-6811) which discloses on page 6806 that Magnifin H5 has an average particle size of 1.5 microns.

With respect to argument (D), Hyde was not relied upon for its teachings about filler surface treatments. Rather, the use of a saturated organic acid as the surface treatment was already provided for by Metzenmacher, the primary reference.

### ***Conclusion***

8. **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

Art Unit: 1714

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vickey Ronesi whose telephone number is (571) 272-2701. The examiner can normally be reached on Monday - Friday, 8:30 a.m. - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

4/19/2007  
Vickey Ronesi

*WR*

*Vasu Jagannathan*  
VASU JAGANNATHAN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700